

AMENDMENTS TO THE SPECIFICATION:

Please replace the Abstract with the following:

An electric charge transfer apparatus comprising a plurality of vertical charge transfer devices for transferring a signal electric charge, a plurality of charge-discharging circuit sets formed next to each of the plurality of vertical charge transfer device, and an output circuit for outputting the signal electric charge transferred by the plurality of charge-discharging circuits to outside of the electric charge transfer apparatus. Each of the plurality of charge-discharging circuit sets includes at least two charge-discharging circuits for discharging the signal electric charge transferred by at least one of adjacent vertical transfer devices consecutively to avoid an electrical barrier caused by left-behind electric charge.